# Commonwealth of Kentucky Energy and Environment Cabinet Department for Environmental Protection Division for Air Quality 200 Fair Oaks Lane, 1st Floor Frankfort, Kentucky 40601 (502) 564-3999

### **Final**

### AIR QUALITY PERMIT Issued under 401 KAR 52:030

Permittee Name: Owensboro Grain Biodiesel L.L.C.

Mailing Address: P.O. Box 1787 Owensboro, Kentucky 42302

Source Name: Owensboro Grain Biodiesel L.L.C.

Mailing Address: P.O. Box 1787 Owensboro, Kentucky 42302

Source Location: 1145 Ewing Road, Owensboro, Kentucky 42302

**Permit ID:** F-06-010 R1

Agency Interest #: 77459

**Activity ID: APE20080001** 

**Review Type:** Conditional Major, Construction / Operating

Source ID: 21-059-00211

Regional Office: Owensboro Regional Office

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Owensboro, Kentucky 42303

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**County:** Daviess

**Application** 

Complete Date: September 13, 2008

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John S. Lyons, Director Division for Air Quality

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	Permit type	Log or	Complete date	Issuance date	Summary of action
		activity #			
F-06-010	Initial	APE2006001	Feb.10, 2006	June 13, 2006	Initial Construction
	Issuance				permit
F-06-010 R1	Minor revision	APE2008001	June 27, 2008	December	Addition of
				12, 2008	insignificant activities
					& testing requirements

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### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

#### 01 (01) BIODIESEL PRODUCTION AND STORAGE TANKS

#### **Description:**

The emission points are three (3) vertical fixed roof storage tanks, each with a capacity of 180,000 gallons, for storing methanol. The tanks are identified as 163T1(1), 163T1(2) and 163T1(3). There is also one (1) vertical fixed roof storage tank, with a capacity of 18,000 gallons, for storing 30% solution of sodium methoxide in methanol. The tank is identified as 163T2. A DeSmet Ballestra Model 45 MMGY biodiesel production unit with maximum production rate of 42,000 pounds of biodiesel per hour, 5,100 pounds of crude glycerin per hour and 550 pounds of fatty acids per hour constitutes another emission point. The production unit consists of transesterification unit process, glycerin separation unit process, glycerin purification unit process, glycerin concentration unit process and the biodiesel purification unit process. The emissions from all the unit processes and the storage tanks constituting the vent gases, made up of methanol and hexane vapor, are ducted to the control system. The raw materials used are refined vegetable oil, methanol and sodium methoxide. Refined vegetable oil is dried at the adjacent refinery and then brought into the feedstock tank on site. Construction commenced with earth moving activities being initiated on July 10, 2006.

#### **Control Equipment:**

i. Water-Cooled Vent Gas Condenser

Model No. 160E4

Manufacturer: DeSmet Ballestra

Coolant: Water (twice-through), flow rate of 500 gal/min or that established during

the most recent performance test

ii. Water/Glycol Vent Gas Chiller

Manufacturer: DeSmet Ballestra

Coolant: Chilled glycol/water, flow rate of 85gal/min or that established during the

most recent performance test

iii. Packed Bed Soybean Oil Scrubber

Model No. 163V10

Manufacturer: DeSmet Ballestra

Scrubbing Liquid: Refined soybean oil (biodiesel feedstock), 18 gal/min or that established during the most recent performance test for scrubbing liquid flow rate.

Vent Gas Condenser, Vent Gas Chiller and Packed Bed Soybean Oil Scrubber are configured in series with vent gases from the methanol storage tanks (3), sodium methoxide in methanol storage tank (1), and biodiesel production unit ducted to this control system.

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **APPLICABLE REGULATIONS:**

401 KAR 63:020, *Potentially hazardous matter or toxic subs*tances is applicable to an emissions unit which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to the provisions of the administrative regulations of the Division for Air Quality. 401 KAR 63:020 is applicable to hexane and methanol emissions.

401 KAR 52:030 - Federally enforceable permits for nonmajor sources: This applies to sources that accept permit conditions that are legally and practically enforceable to limit their potential to emit (PTE) below the major source thresholds that would make them subject to 401 KAR 52:020.

40 CFR 60 Subpart NNN for *VOC Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations*, applies to the biodiesel plant.

40 CFR 60 Subpart RRR for VOC Emissions from SOCMI Reactor Processes applies to the biodiesel plant.

401 KAR 60:005, Section 3, incorporating by reference 40 CFR 60.110b to 60.117b (Subpart Kb), Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 - this rule applies to tanks 163T1(1), 163T1(2) and 163T1(3).

#### 1. Operating Limitations:

a. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020 Section 3]

#### **Compliance Demonstration Method:**

The permittee is deemed to be in compliance during biodiesel production when the condenser, chiller and scrubber operate as specified in **Specific Control Equipment Operating Conditions 7**.

- b. The permittee shall equip each of the three (3) 180,000 gallon methanol storage tanks with the following: [40 CFR 60.112b (a)]
  - A closed vent system and control device meeting the following specifications: [40 CFR 60.112b (a)(3)]
  - i. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, 40 CFR 60.485(b).
  - ii. The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater.

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### **Compliance Demonstration Method:**

See <u>Testing Requirements 3, Specific Monitoring Requirements 4, Specific Recordkeeping Requirements 5, and Specific Reporting Requirements 6.</u>

- c. The permittee of each source that is equipped with a closed vent system and control device (other than a flare) for each storage vessel, as required in <u>Operating Limitations</u> <u>1 (b)</u> is exempt from 40 CFR 60.8 of the General Provisions and shall meet the following requirements. [40 CFR 60.113b (c)]
  - i. Submit for approval by the Division as an attachment to the notification required by 40 CFR 60.7(a)(1) or, if the facility is exempt from 40 CFR 60.7(a)(1), as an attachment to the notification required by 40 CFR 60.7(a)(2), an operating plan containing the information listed below:
    - (A) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under 40 CFR 60 Subpart Kb, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816°C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.
    - (B) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).
  - ii. Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Division in accordance with 40 CFR 113b(c)(1), unless the plan was modified by the Division during the review process. In this case, the modified plan applies.

#### **Compliance Demonstration Method:**

For compliance reporting, refer to **Section F. 9**.

d. The facility will reduce emissions of TOC (less methane and ethane) by 98 weight percent or to a TOC (less methane and ethane) of 20 ppmv on a dry basis corrected to 3 percent oxygen whichever is less stringent.

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Compliance Demonstration Method:**

Performance testing to be conducted every five years and the control equipment will be operated under the conditions established during the most recent performance test.

### 2. <u>Emission Limitations</u>:

See **Section D.3**, **Source Emission Limitations** for facility-wide hazardous air pollutant (HAP) and volatile organic compound (VOC) emission limitations.

#### **Compliance Demonstration Method:**

The permittee shall install, maintain and operate the condenser, chiller and scrubber as specified in **Specific Control Equipment Operating Conditions 7**. Also see Section **D.3**, **Source Emission Limitations**, *Compliance Demonstration Method*.

### 3. <u>Testing Requirements</u>:

- a. Within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration/test on the affected facility in accordance with 401 KAR 50:055, General compliance requirements, to determine compliance with HAP emissions specified in Section D(3) and the HAP removal efficiency. These performance tests must also be conducted in accordance with General Provisions G(d)7,8 this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test. The permittee also shall determine the scrubber liquid flow rate and differential pressure drop, and the respective condenser and chiller inlet and outlet temperatures during the test. The emissions testing shall be repeated at least once every five years from the date of the prior test. The emissions testing shall be done in accordance with regulations 401 KAR 59:005 Section 2(2) and KAR 50:045 Section 4.
- b. The permittee shall demonstrate that the reactor process vent stream has a TOC concentration for compliance with the low concentration exemption in 40 CFR 60.700(c)(8), by conducting an initial performance test and calculations to measure the TOC concentration pursuant to 40 CFR60.704(h).
- c. The permittee shall demonstrate compliance with 40 CFR 60.662 by
  - i. Running the facility at full operating conditions and flow rates during any performance test.
  - ii. Using the methods listed in Appendix A of 40 CFR 60 as reference methods to determine compliance with emission limit or percent reduction efficiency specified under 40 CFR 60.662 (a).

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 4. **Specific Monitoring Requirements:**

a. The following parameters shall be continuously monitored, on computer or strip chart, by the permittee:

### i. Condenser and chiller:

- (A) Vent gas flow rate.
- (B) Coolant liquid flow rate through the condenser and chiller.
- (C) Inlet and coolant temperature at the condenser and chiller.

#### ii. Scrubber:

- (A) Refined soybean oil flow rate.
- (B) Pressure drop across the scrubber.
- b. The permittee shall comply with the requirements of 40 CFR 60.116b for the three (3) 180,000 gallon methanol storage tanks as follows:
  - i. Keep copies of all records required by 40 CFR 60.116b, except for the record required by 40 CFR 60.116b (b), for at least 2 years. The record required by 40 CFR 60.116b (b) will be kept for the life of the source. [40 CFR 60.116b (a)]
  - ii. Keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel [40 CFR 60.116b (b)]
  - iii. Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below. [40 CFR 60.116b (e)]
    - (A) For storage vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b (e)(1)]
    - (B) For other liquids, the vapor pressure: [40 CFR 60.116b (e)(3)]
      - 1. May be obtained from standard reference texts, or
      - 2. Determined by ASTM D2879–83, 96, or 97 (incorporated by reference —see 40 CFR 60.17); or
      - 3. Measured by an appropriate method approved by the Division; or
      - 4. Calculated by an appropriate method approved by the Division.

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 5. **Specific Recordkeeping Requirements:**

- a. Preventive maintenance records for the condenser, chiller and scrubber shall be maintained in accordance with <u>Specific Control Equipment Operating Conditions 7</u>.
   Computerized records shall be considered adequate to meet this requirement. This data shall be provided to the Division upon request.
- b. A log of the results of the semiannual inspections performed on the condenser, chiller and scrubber shall be maintained in accordance with **Specific Control Equipment Operating Conditions 7.**
- c. Records of condenser and chiller vent flow rate, coolant flow rate and coolant inlet and outlet temperature; and refined soybean oil flow to the scrubber and pressure drop across the scrubber, shall be continuously recorded by computer system or strip chart in accordance with **Specific Control Equipment Operating Conditions 7.**
- d. The permittee shall keep calendar month records of the usage of refined vegetable oil, methanol and sodium methoxide in methanol, or any other HAP containing material.
- e. At the end of each month hazardous air pollutant (HAP) emissions in tons shall be calculated in accordance with **Section D.3**, **Source Emission Limitation**. The permittee shall maintain records onsite such that they are readily accessible.
- f. A monthly log of operating hours, the amount of each raw material used; and the amount of biodiesel produced, including purchase orders, invoices, and other documents, to support the quarterly log shall be maintained.
- g. Also see Section F.
- h. Keep up-to-date, readily accessible record of data measured during each performance test.
- i. Keep up-to-date and readily accessible records of any change in equipment or process operations that increases the design production capacity of the process unit in which the affected facility is located.
- j. The permittee shall comply with the requirements of 40 CFR 60.115b for the three (3) 180,000 gallon methanol storage tanks as follows:
  - After installing control equipment in accordance with <u>Operating Limitations 1 (b)</u> (closed vent system and control device other than a flare), the permittee shall keep the following records. [40 CFR 60.115b (c)]
  - i. A copy of the operating plan.
  - ii. A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2).

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### **Specific Reporting Requirements:**

Reporting of the following shall be done on a semi annual basis:

- a. Any deviations from requirements of **Section B** shall be reported.
- b. The individual and combined HAP emissions for each month in the semi-annual period determined in accordance with **Section D.3**, **Source Emission Limitation** shall be reported.
- c. The consecutive 12 month total of individual and combined HAP emissions for each month ending in the semi-annual period determined in accordance with **Section D.3**, **Source Emission Limitation** shall be reported.
- d. The facility must submit to the Division an initial report including a concentration measurement using the test method specified in 40 CFR 60.704.
- e. Any change in equipment or process operation that increases the vent stream concentration above the low concentration exemption in 40 CFR 60.700 (c)(8) must be reported to the Division as soon as possible after the change and no later than 180 days after the change. The reports maybe submitted along with the semi-annual report. If the vent stream concentration is above 300 ppmv as measured with Method 18 or above 150 ppmv as measured using method 25A, a performance test must be completed within the same time period.

### 7. Specific Control Equipment Operating Conditions:

- a. The condenser, chiller and packed bed scrubber shall be operated at all times while storing liquid materials and operating the biodiesel system. The condenser, chiller and packed bed scrubber shall be inspected for proper operation semiannually. Preventive maintenance shall be performed in accordance with the manufacturer's recommendations, and shall include at a minimum the following for the packed bed scrubber:
  - i. Cleaning or replacement of spray nozzles;
  - ii. Lubrication of pumps, fans, etc.; and
  - iii. Check/calibration of critical instruments, e.g. water flow meters or indicators.
- b. The condenser and chiller inlet coolant temperatures shall be maintained at all times at a temperature not exceeding 90°F for the condenser and 40°F for the chiller, or the temperatures established during the most recent performance test. The coolant liquid flow rate shall be at least 500 gallons per minute through the condenser and at least 85 gallons per minute through the chiller, or those flow rates established during the most recent performance test.

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# SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. The packed bed scrubber refined soybean oil flow rate shall be at least 18 gallons per minute while the scrubber is in operation, or the flow rate established during the most recent performance test and the pressure drop across the scrubber shall be 4 inches of water or the pressure drop established during the most recent performance test.

### **8.** Alternate Operating Scenarios:

None

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 01 (02) EQUIPMENT LEAKS FUGITIVE EMISSIONS FROM BIODIESEL PRODUCTION UNIT AND STORAGE TANKS

Pumps - 53 (count)
Agitators - 3 (count)
Valves - 810 (count)
Centrifuge - 1 (count)
Flanges/connectors - 865 (count)

#### **APPLICABLE REGULATIONS:**

40 CFR 60 Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, is applicable to affected facilities in the synthetic organic chemicals manufacturing industry that commences construction or modification after January 5, 1981. The Subpart VV regulates emissions of VOCs from equipment leaks (valves, flanges, pump seals, etc). The group of all equipment within a process unit is an affected facility.

#### NON APPLICABLE REGULATION:

40 CFR 60 Subpart VVa, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 is not applicable since the affected facility commenced construction before the applicability date and there has not been a reconstruction or modification.

#### 1. **Operating Limitations:**

#### **Pumps in Light Liquid Service**

- a. (1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). [40 CFR 60.482-2(a)(1)]
  - (2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a)(2)]
- b. (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 60.482-2(b)(1)]
  - (2) If there are indications of liquids dripping from the pump seal, a leak is detected. [40 CFR 60.482-2(b)(2)]
- c. (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-2(c)(1)]

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)(2)]

First attempts at repair include, but are not limited to, the practices described in paragraphs (i) and (ii), where practicable.

- (i) Tightening the packing gland nuts;
- (ii) Ensuring that the seal flush is operating at design pressure and temperature.
- d. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the monthly monitoring requirements, provided the requirements specified in 40 CFR 60.482-2a (d) (1) through (6) are met. [40 CFR 60.482-2a (d)]
  - (1) Each dual mechanical seal system is—
    - (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
    - (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR 60.482–10; or
    - (iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
  - (2) The barrier fluid system is in heavy liquid service or is not in VOC service.
  - (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
  - (4) (i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
    - (ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either paragraph (d)(4)(ii)(A) or (B) of 40 CFR 60.482-2a.
      - (A) Monitor the pump within 5 days as specified in 40 CFR 60.485(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
      - (B) Designate the visual indications of liquids dripping as a leak.
  - (5) (i) Each sensor as described in 40 CFR 60.482-2a (d)(3) is checked daily or is equipped with an audible alarm.
    - (ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
    - (iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in 40 CFR 60.482-2a (d) (5) (ii), a leak is detected.

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- (6) (i) When a leak is detected pursuant to 40 CFR 60.482-2a (d) (4) (ii) (A), it shall be repaired as specified in (c) above.
  - (ii) A leak detected pursuant to 40 CFR 60.482-2a (d) (5) (iii) shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.
  - (iii) A designated leak pursuant to 40 CFR 60.482-2a (d) (4) (ii) (B) shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.

### Valves in Gas/Vapor Service and Valves in Light Liquid Service

- e. Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 2, and 40 CFR 60.482-1(c). [40 CFR 60.482-7(a)]
- f. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. [40 CFR 60.482-7(b)]
- g. (1) Each valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. [40 CFR 60.482-7(c)(1)]
  - (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)(2)]
- h. (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-7(d)(1)]
  - (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-7(d)(2)]
- i. First attempts at repair include, but are not limited to, the following best practices where practicable:
  - (1) Tightening of bonnet bolts;
  - (2) Replacement of bonnet bolts;
  - (3) Tightening of packing gland nuts;
  - (4) Injection of lubricant into lubricated packing.

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service and connectors

- j. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:
  - (1) Monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and comply with the requirements of paragraphs (b) through (d) of 40 CFR 60.482-8.
  - (2) Eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.
- k. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- 1. (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482–9.
  - (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- m. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482–2(c)(2) and 40 CFR 60.482–7(e).

#### Closed vent systems and control devices

- n. Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.
- o. Owners or operators of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.
- p. The closed vent system shall be inspected according to the procedures and schedule specified below:
  - (1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall:
    - (i) Conduct an initial inspection according to the procedures in 40 CFR 60.485(b); and
    - (ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
  - (2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- (i) Conduct an initial inspection according to the procedures in 40 CFR 60.485(b); and
- (ii) Conduct annual inspections according to the procedures in 40 CFR 60.485(b).
- q. Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable with a first attempt at repair being made no later than 5 calendar days after the leak is detected and repair shall be completed no later than 15 calendar days after the leak is detected.
- r. Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them [40 CFR 60.482-10(m)]

#### 2. <u>Emission Limitations</u>:

None

### 3. <u>Testing Requirements</u>:

Refer to Subsection 1, Operating Limitations.

#### 4. Specific Monitoring Requirements:

- a. Refer to Subsection 1, Operating Limitations.
- b. The permittee shall monitor the amount of raw materials and final products for use in AP-42 emission calculations for pumps and valves in light liquid service and valves in gas/vapor service.

### 5. Specific Recordkeeping Requirements:

All Piping Equipment (Valves and Pumps)

- a. In accordance with 40 CFR 60.7(b), the facility shall maintain records of the occurrence of any startup, shutdown, or malfunction in the operation of all piping equipment.
- b. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: [40 CFR 60.486(b)]
  - (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
  - (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months.

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- (3) The identification on equipment except on a valve, may be removed after it has been repaired.
- c. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8 and 60.483-2, the following information shall be recorded in a log and shall be kept for 2 years in readily accessible location: [40 CFR 60.486(c)].
  - (1) The instrument and operator identification numbers and the equipment identification number.
  - (2) The date the leak was detected and the dates of each attempt to repair the leak.
  - (3) Repair methods applied in each attempt to repair the leak.
  - (4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.
  - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
  - (6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
  - (7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
  - (8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
  - (9) The date of successful repair of the leak.
- d. For the closed vent system and control devices as described in 40 CFR 60.482-10, the following information pertaining to the design requirements shall be recorded and kept in a readily accessible location:
  - (1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
  - (2) The dates and descriptions of any changes in the design specifications.
  - (3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482–10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
  - (4) Periods when the closed vent systems and control devices required in 40 CFR 60.482–2, 60.482–3, 60.482–4, and 60.482–5 are not operated as designed, including periods when a flare pilot light does not have a flame.

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- (5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482–2, 60.482–3, 60.482–4, and 60.482–5.
- e. The facility shall develop and maintain a list of identification numbers for equipment subject to 40 CFR Part 60 Subpart VV.
- f. The facility shall maintain a list of identification numbers for equipment that are designated for no detectable emissions as provided at 40 CFR 60.482-2(e) and 40 CFR 60.484-7(f). The designation shall be signed by a facility representative.
- g. The facility shall maintain a list of equipment identification numbers for pressure relief devices.
- h. The facility shall maintain records of the dates of each compliance test as required, the background level measured during each compliance test and the maximum instrument reading measured at the equipment during each compliance test.
- i. The facility shall maintain a list of identification numbers for equipment in vacuum service.
- j. All records required to be kept by this permit shall be maintained on site at the facility for at least two (2) years from the date of record.

#### 6. Specific Reporting Requirements:

- a. The facility shall submit semiannual reports to the Division beginning six months after the initial startup date. [40 CFR 60.487(a)]
- b. The initial semiannual report to the Division shall include the following information: [40 CFR 60.487(b)]
  - (1) Process unit identification.
  - (2) Number of valves subject to the requirements of 40 CFR 60.482-7, excluding those valves designated for no detectable emissions under the provisions of 40 CFR 60.482-7(f).
  - (3) Number of pumps subject to the requirements of 40 CFR 60.482-2, excluding those pumps designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e) and those pumps complying with 40 CFR 60.482-2(f).
- c. All semiannual reports to the Division shall include the following information, summarized from the information in 40 CFR 60.486. [40 CFR 60.487(c)]

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### SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- (1) Process unit identification.
- (2) For each month during the semiannual reporting period,
  - a. Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 60.483-2,
  - b. Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1),
  - c. Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i),
  - d. Number of pumps for which leaks were not repaired as described in 40 CFR 60.482-2(c)(1) and (d)(6)(ii),
  - e. The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
- (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
- (4) Revision to items reported according to 40 CFR 60.487(b) if changes have occurred since the initial report or subsequent revision to the initial report.
- d. The facility shall report the results of all performance tests to the Division, by reference, 40 CFR 60.8.
- e. See **Section F**, Conditions 5, 6, 7, 8 and 9.

### 7. Specific Control Equipment Operating Conditions:

None

#### 8. Alternate Operating Scenarios:

None

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### **SECTION C – INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	Generally Applicable Regulation
1. One (1) 54,000 Gallon Soybean oil Feedstock Tank	None
2. Three (3) 54,000 Gallon Biodiesel Tanks	None
3. Two (2) 455,000 Gallon Biodiesel Tanks	None
4. Two (2) 13,000 Gallon Glycerine Tanks	None
5. One (1) 455,000 Gallon Glycerine Tank	None
6. One (1) 13,000 Gallon Fatty Acid Tank	None
7. One 9500 gallon capacity hydrochloric (HCl) acid storage tank and related handling	401 KAR 63:020
8. One 7000 gallon capacity citric acid storage tank and related handling	401 KAR 63:010
9. Haul roads – paved and unpaved	401 KAR 63:010

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
- 2. Hazardous Air Pollutant (HAP) emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, or methods as approved by the Division, shall not exceed the respective limitations specified herein.

### 3. <u>Source Emission Limitations:</u>

The actual HAP emissions shall not equal or exceed 9.0 tons per year of any single HAP or 22.5 tons per year of the combination of HAPs. These annual limitations shall not be exceeded during any consecutive 12 month period for the entire source.

### **Compliance Demonstration Method:**

Monthly HAP emissions from bio-diesel production 01 (01) shall be calculated and shall be used to calculate the annual (consecutive 12 month) emission rates as follows:

#### **Single HAP Emission:**

Monthly methanol emission = [EF] x [monthly biodiesel production, lb] x [ton/2000 lb]

Monthly hexane emission = [EF] x [monthly biodiesel production, lb] x [ton/2000 lb]

Where: EF = 0.000048 lb methanol/lb biodiesel produced, or the most recently

tested value

EF = 0.000027 lb hexane/lb biodiesel produced, or the most recently

tested value

Annual single HAP emission =  $\sum$ [single HAP emission this month (tons) +total single HAP emissions past consecutive eleven (11) months (tons)]

#### **Combined HAP Emissions:**

Combined Monthly HAP Emissions = 
$$\sum_{j=1}^{m} HAP_{j}$$

Where, HAP j = individual HAP emissions, tons (i.e., methanol, hexane)

m = total number of single HAP emissions

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# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

Annual combined HAP emissions =  $\sum$ [combined HAP emissions this month (tons) +total combined HAP emissions past consecutive eleven (11) months (tons)]

Demonstration of compliance with the combined HAP limit shall also result in limiting the VOC potential to emit (PTE) below the major source threshold of 100 tons per year that would otherwise make the source subject to the requirements of 401 KAR 52:020.

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### **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b (IV)(1) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place (as defined in this permit), and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality[401 KAR 52:030 Section 3(1)(f)1a and Section 1a (7) of the Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources incorporated by reference in 401 KAR 52:030 Section 10].
- 3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit:
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

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## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. All deviations from permit requirements shall be clearly identified in the reports.

- In accordance with the provisions of 401KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.5 [Section 1b V(3) and (4) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 9 Pursuant to 401KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

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## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

Division for Air Quality

Division for Air Quality

Owensboro Regional Office Central Files

3032 Alvery Park Drive WestSuite 700 200 Fair Oaks Lane, 1<sup>st</sup> Floor

Owensboro, KY 42303 Frankfort, KY 40601

- 10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.
- 11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.
- 12. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
  - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
    - i. The size and location of both the original and replacement units; and
    - ii. Any resulting change in emissions;
  - b. The PTE of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
  - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
  - d. The replacement unit shall comply with all applicable requirements; and
  - e. The source shall notify Regional office of all shutdowns and start-ups.
  - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
    - i. Re-install the original unit and remove or dismantle the replacement unit; or
    - ii. Submit an application to permit the replacement unit as a permanent change.

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#### SECTION G – GENERAL PROVISIONS

### (a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a (2) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a (5) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 4. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
- 5. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit[Sections 1a (6) and (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

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### SECTION G – GENERAL PROVISIONS (CONTINUED)

6. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

- 7. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a (11) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 8. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a (3) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 9. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a (12)(b) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 10. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a (9) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 11. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
- 12. This permit does not convey property rights or exclusive privileges [Section 1a (8) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
- 13. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- 15. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders

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### **SECTION G – GENERAL PROVISIONS (CONTINUED)**

16. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- 17. Permit Shield A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - a. Applicable requirements that are included and specifically identified in this permit; and
  - b. Non-applicable requirements expressly identified in this permit.
- 18. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].
- 19. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

### (b) <u>Permit Expiration and Reapplication Requirements</u>

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

#### (c) Permit Revisions

- 1. Minor permit revision procedures specified in 401 KAR 52:030 Section 14 (3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14 (2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

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### SECTION G – GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

- 1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- 2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
  - a. The date when construction commenced.
  - b. The date of start-up of the affected facilities listed in this permit.
  - c. The date when the maximum production rate specified in the permit application was achieved.
- 3. Pursuant to 401 KAR 52:030, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- 4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the final draft permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- 5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (test) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7,8 this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.
- 6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

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### **SECTION G – GENERAL PROVISIONS (CONTINUED)**

7. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

8. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

### (e) <u>Acid Rain Program Requirements</u>

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

### (f) <u>Emergency Provisions</u>

- 1. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and.
  - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
- 2. Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

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### **SECTION G – GENERAL PROVISIONS (CONTINUED)**

3. Emergency conditions listed in General Provision G(f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].

4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

### (g) <u>Risk Management Provisions</u>

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

### (h) Ozone depleting substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

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### **SECTION H - ALTERNATE OPERATING SCENARIOS**

None

### **SECTION I - COMPLIANCE SCHEDULE**

None